

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF:

Kazuyuki HIDA et al.

: GROUP ART UNIT: 1796

SERIAL NO.: 10/577,152

: Examiner: Peter D. Mulcahy

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FOR: RESIN COMPOSITION FOR SEAMLESS AIR BAG COVER AND SEAMLESS
AIR BAG COVER OR SEAMLESS INSTRUMENT PANEL HAVING AN AIR BAG
COVER USING THE COMPOSITION

DECLARATION UNDER 37 C.F.R. § 1.132

ASSISTANT COMMISSIONER FOR PATENTS

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SIR:

Now comes Gensei TERAMOTO who deposes and states:

1. I am a researcher belonging to PRIME POLYMER CO., LTD. who is one of the assignees of the above-identified application.
2. That I am a graduate of TOYO University and received my master's degree of Applied Chemistry at Tokyo University of Agriculture and Technology in the year of 2002.
3. That I have been employed by Idemitsu Kosan Co., Ltd. of 1-1, Marunouchi 3-chome, Chiyoda-ku, Tokyo 100-8321, Japan from 2002 to 2005 for 3 years as a researcher in the field of Polymer Chemistry, then I have been employed by PRIME POLYMER CO., LTD. of 5-2, Higashi-Shimbashi 1-chome, Minato-ku, Tokyo 105-7117 Japan from 2005 to 2010 for 5 years as a researcher in the field of Polymer Chemistry.

4. The following experiments were carried out by me.

Additional Comparative Examples 4 and 5

Resin compositions of Additional Comparative Examples 4 and 5 were obtained by the method described in Examples 1 and 2 and Comparative Examples 1 to 3 in the specification of the present invention.

The obtained resin compositions were evaluated in accordance with the methods described in Examples 1 and 2 and Comparative Examples 1 to 3 in the specification of the present invention. The results are shown in the following Table. Examples 1 and 2 are shown in the Table for comparison with Additional Comparative Examples 4 and 5.

Table

Example Additional Comparative Example	1	2	4	5
Components of formulation (% by mass)				
PP-A	65	65	50	65
Elastomer A	10		10	10
Elastomer B		10		
Talc B	25	25	35	5
Grass fiber			5	
Mica				20
Property for expansion of air bag	passed	passed	failed	failed
MFR (g/10 min)	25	25	20	5
Flexural modulus (MPa)	2200	2200	4500	4000
Izod (kJ/m ²)	25	28	3	3
Condition of fracture by high rate impact test	brittle	brittle	brittle	brittle

(Notes)

PP-A: A block polypropylene [manufactured by IDEMITSU SEKIYU KAGAKU Co., Ltd.; J3054HP]; MFR: 40 g/10 minutes.

Elastomer A: An ethylene-butene-1 copolymer elastomer [manufactured by MITSUI KAGAKU Co., Ltd.; TUFMER A1050S]; MFR: 1.0 g/10 minutes; the density: 861 kg/m³.

Elastomer B: An ethylene-octene-1 copolymer elastomer [manufactured by DU PONT DOW Company; EG8842]; MFR: 1.0 g/10 minutes; the density: 857 kg/m³.

Talc B: The average fiber diameter: 17 μ m; the distribution of particle diameter: 8% by mass of particles having a diameter of 5 μ m or smaller and 8% by mass of particles having a diameter exceeding 40 μ m.

Glass fiber: The average fiber diameter: 13 μ m; the average fiber length: 6 mm; [manufactured by ASAHI FIBER GLASS Co., Ltd.].

Mica: The average particle diameter: 24 μ m; [manufactured by Fuji Talc Industrial Co., Ltd.].

5. The undersigned petitioner declares further that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of this application or any patent issuing thereon.

6. Further deponent saith not.

Gensei Teramoto

Gensei TERAMOTO

August 4, 2010

Date